

indicated. Such changes have taken place during the past two-year period. It should be noted that part of the change is due to the Osteopathic merger which added over 2,000 physicians to the State total.

The figures indicate that the increase within the Private Practice sector of Medicine has not matched increases in other sectors. This is in part due to changes in the classification of some specialists, but primarily to a real increase in the number of non-federal physicians in fields other than private practice.

Table 2 shows some current physicians/population ratios. California's ratio is, as it has been in the past, higher than for the total United States. The comparable Non-Federal physicians/civilian population ratio for the U.S. is 132/100,000. It is of interest that there is a substantial difference in such ratios between urbanized and rural areas in the

State. This is partially due to the fact that the physician counts include many in training programs and in research, physicians who would naturally be found primarily in urbanized areas. It is also true that many of the more specialized physicians are generally confined to urban areas, hence raising such ratio.

Although the use of physician/population ratios to determine physician supply has been subject to some criticism, they are employed here in order to provide information of a comparative nature. In some respects they understate the medical manpower available to the community since physicians in federal service also provide services to segments of the civilian population, e.g., dependents of members of the armed forces, veterans for non-service connected disabilities in VA hospitals, etc.

693 Sutter Street, San Francisco, California 94102.

## **Educational Programs in Nursing and Related Career Opportunities**

THE MEMBERS of the A.M.A. Committee on Nursing believe it is fundamental to an understanding of nursing and its problems that physicians have some knowledge of the differences among educational programs in nursing and related career opportunities. Further, the members believe that such an understanding is a vital link in strengthening the relationships between the medical and nursing professions. Therefore the following report has been prepared to provide an overview of the diversification in nursing education.

There are presently wide varieties of educational programs in nursing from which a high school student can choose if she desires to become a nurse. There is also more than one avenue to follow if the professional student wishes to obtain a baccalaureate degree. The educational programs in higher education also vary, dependent on the objectives and the philosophy of the faculty and the university of which the nursing school is an integral part.

The table represents the types of programs available to potential or graduate nurses, or both, the educational facility in which the particular program is offered, and the related fees as well as the locus of responsibility for the fee.

A few experimental programs hold some promise for the future; for example, certain diploma schools have reduced the length of their programs to two years. In order to provide both supervised experience and some remuneration for the individual, the

schools have established internships which vary in length up to one year and provide a stipend. Some state laws require three years of educational preparation for admission to examinations for licensure. This stipulation prevents both experimentation with the length of diploma school programs and also the employment, in certain states, of graduates of associate degree programs. However, efforts are currently being made in several states to revise nurse practice acts in order that such experimentation will be possible.

One diploma school has arranged a plan whereby their students may elect to attend a nearby college at the same time they are attending the hospital school. One of the more interesting community plans is that of five schools pooling teaching facilities and sharing faculty for the first year of their diploma programs. Eventually they visualize one large, community, two- or three-year program which will use the clinical facilities and the dormitories of the five hospitals involved in the project as well as the educational facilities of a local community college.

Enlightened nurses, educators, and others recognize that the diversity and heterogeneity of nursing programs lead to misconceptions and misunderstanding on the part of patients, physicians, and potential nursing students and their parents. They realize that nursing education is presently in the process of maturation. As yet no one has come forward with a plan acceptable to all interested groups and one which will lead the way out of confusion. The American philosophy of education has always been that of diversity—not homogeneity. In keeping with this philosophy, the concern about the varieties of programs may not be germane. The challenge for

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Data on Programs in Nursing Education

Type of Program	Length of Program	Minimal Educational Requirements	Educational Setting	Administrative Control of School	Range or Average Tuition	Financial Responsibility	Certificate or Degree Conferred	Position for Which Eligible
Practical nurse	Approx 1 calendar yr	2 or more yr of high school, dependent on school requirements	Vocational high school, hospital, or junior college	Local school board or board of trustees of hospital	Free; up to \$800	Usually school subsidized; student purchases uniforms, books, etc.	Diploma or certificate—eligible to take examination for licensure as LPN	Bedside nursing under supervision of physician or professional nurse
Diploma (hospital)	27-36 mo	High school diploma	Hospital	Board of trustees of hospital, or independently incorporated yet associated with a particular hospital	\$100 to \$2,207 for 3 yr (median school \$836)	Student tuition, hospital and private funds	Diploma—eligible to take examination for licensure as RN	Bedside nursing
Associate degree	2 academic to 2 calendar yr	High school diploma	Community, or junior college	Local school board, or board of trustees of college	Minimal in state or community jr. col. up to \$2,000 per yr in private colleges	Student tuition, state or community sponsorship, and private funds	*Associate degree—eligible to take examination for licensure as RN	Bedside nursing
Basic or generic baccalaureate	4 academic or 4 calendar yr. A few schools offer 5-yr courses	High school diploma	College or university	College or university	Varies in state university; up to \$2,000 or more per yr in private universities	Student tuition and college or university funds	Baccalaureate degree—eligible to take examination for licensure as RN	Bedside nursing, public health nursing (candidate for head nursing)
Baccalaureate for RN	2½-3 academic yr or more	High school diploma	College or university	College or university	Varies in state university; up to \$2,000 or more per yr in private universities	Student tuition and college or university funds	Baccalaureate degree (BS, BN, etc.)	Bedside nursing, public health nursing (candidate for head nursing)
Master's	1-2 yr	Baccalaureate degree	College or university	College or university	From \$2,200 to \$3,500 per yr	Student tuition (traineeships avail. to students from USPHS and others)	Master's degree (MS, MA, MEd, MPH)	Administrator, educator, clinical specialist
Doctoral	Varies with choice of major area; approx 3 yr or more	Baccalaureate and master's degrees	College or university	College or university	From \$2,200 to \$3,500 per yr	Student tuition (research fellowships avail. to students from USPHS and others)	Doctoral Degree in nursing or related field	Administrator, educator, investigator, and others

\* Some states do not permit graduates of these schools to qualify for RN licensure and practice.

nurses and others, including physicians, is to define the role of the professional nurse and the practical nurse, and to examine these roles and responsibilities in relation to the changing role of the physician in a modern scientific world. What kind of care do patients need and who can most effectively provide that care? When the answer to this question has been made explicit and has been agreed upon, it might be less difficult to predict the type of educational program in nursing essential to meet the needs of the sick of the nation, to teach preventive measures for maximum health and the like.

The A.M.A. Committee on Nursing respectfully suggests that each physician keep informed on trends in nursing in order that he can contribute wherever possible to the improvement of nursing education programs and to the clarification of the role of the nurse.

In conclusion, the Committee suggests that the Committee on Careers, National League for Nursing, 10 Columbus Circle, New York, be contacted for information on accreditation of professional schools of nursing and for careers material in general.